

# PORT OF OAKLAND'S AIR QUALITY PROGRAM

## REDUCING EMISSIONS FROM PORT OF OAKLAND MARITIME ACTIVITIES

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## OVERVIEW

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- ◆ V2K AIR QUALITY CONTROL MEASURES
- ◆ TRUCK PROGRAM
  - ◆ DESCRIPTION
  - ◆ DEVELOPMENT
- ◆ STATUS
- ◆ ISSUES
- ◆ WHAT'S NEXT?



## SOURCES

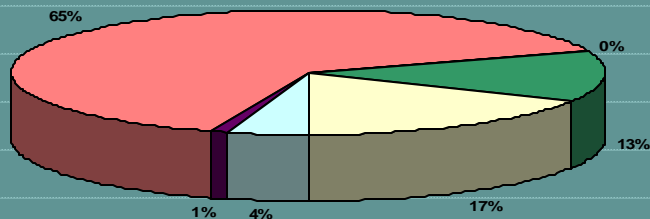
### ◆ PLAN TO UPDATE INVENTORY FOR PROPOSED "NEW BERTH 21"

	<u>NO<sub>x</sub></u>	<u>PM</u>
SHIPS	48%	65%
TRUCKS	19%	13%
CARGO EQUIPMENT	21%	17%
TRAINS	11%	4%

◆ Note: Our focus is on PM, as the community's chief health concern

**Projected 2003 Particulate Emissions per Equipment Category**

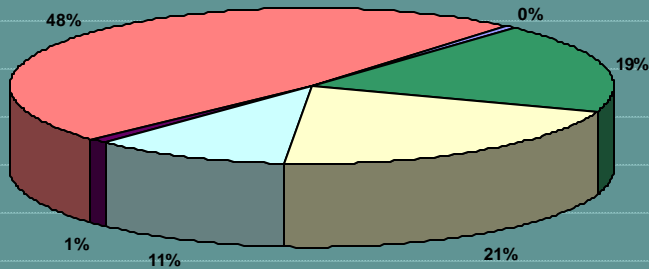
Port of Oakland, EPD, March 27, 2001  
Source: Berths 55-58 EIR, Dec. 1998



<ul style="list-style-type: none"> <li>▣ Vehicles</li> <li>▣ Cargo-Handling Equipment</li> <li>▣ Tug-Boats</li> </ul>	<ul style="list-style-type: none"> <li>▣ On-road Trucks</li> <li>▣ Trains</li> <li>▣ Ships (maneuvering, hoteling, cruising)</li> </ul>
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### Projected NOx Emissions for 2003 per Equipment Category

Port of Oakland, EPD, March 27, 2001  
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■ Vehicles	■ On-road Trucks
■ Cargo-Handling Equipment	■ Trains
■ Tug-Boats	■ Ships (maneuvering, hoteling, cruising)

## AIR QUALITY CONTROL MEASURES

### ◆ VISION 2000 MITIGATION PACKAGE

- ◆ \$1.5 million Local trucks
- ◆ \$5.2 million Cargo handling equipment
- ◆ \$ .1 million Aqueous diesel truck demo
- ◆ \$ .5 million Tug engines
- ◆ \$ .7 million Retrofit 28 local buses

## CONTROL MEASURES (cont.)

- ◆ VISION 2000 MITIGATIONS, CONTINUED
  - ◆ \$ .6 million Local industry emission controls
  - ◆ \$ .4 million Miscellaneous design/operations
  - ◆ OTHER: PM monitoring, encourage clean switch engines, investigate alternative fuel stations
- ◆ CHANNEL DEEPENING TO -50 FEET
  - ◆ ELECTRIC DREDGES (all construction controls cost about \$4.5 million)



## TRUCK PROGRAM – DESCRIPTION

### **VOLUNTARY, REIMBURSEMENT- BASED PROGRAM FOR TRUCK OWNERS TO REDUCE AIR EMISSIONS**

- ◆ REPLACE trucks with newer, cleaner models
- ◆ REPOWER trucks with newer, cleaner engines (Moyer grant)
- ◆ RETROFIT truck exhaust systems

## TRUCK PROGRAM - DEVELOPMENT

- ◆ PROJECT MANAGER IS TIM LEONG
- ◆ TIAX ASSISTING WITH PROGRAM
- ◆ TECHNICAL REVIEW PANEL
  - ◆ Community, West Oakland Neighbors
  - ◆ Truckers, environmental groups, others
  - ◆ Air District, EPA, City Council
  - ◆ Advice and consensus within program requirements
  - ◆ Goal is to reduce PM in maritime area adjacent to West Oakland





## STATUS

- ◆ MANAGEMENT AND ADMINISTRATIVE STRUCTURE
  - ◆ EXECUTIVE COMMITTEE
  - ◆ TECHNICAL ADVISORY COMMITTEE
  - ◆ PROJECT MANAGER IS TIM LEONG
  - ◆ TIAX WILL ASSIST WITH PROGRAM – GATEWAY CITIES EXPERIENCE

## ISSUES

- ◆ PROXIMITY TO WEST OAKLAND
  - ◆ SHUTTLE TRUCKS
  - ◆ TRUCKS THAT CALL FREQUENTLY AT THE MARINE TERMINALS
- ◆ EQUIPMENT
  - ◆ ENGINE REPLACEMENT VS. TRUCK REPLACEMENT
  - ◆ DIESEL OXIDATION CATALYST VS. DIESEL PARTICULATE FILTER

## ISSUES (cont.)

- ◆ ELIGIBILITY CRITERIA
  - ◆ DIRTY, DIRTIER, DIRTIEST?
  - ◆ COST PER TON OF EMISSION REDUCTIONS
    - ◆ \$13,600 OR LESS FOR NO<sub>x</sub> +10PM
  - ◆ TRUCK OWNER CONTRIBUTION



## ISSUES (cont.)

### ◆ OUTREACH

- ◆ TRUCKERS, BUSINESSES, UNIONS
- ◆ TRANSLATION SERVICES
- ◆ WEB SITE, BROCHURES, ETC.

### ◆ CONTRACTING

- ◆ REIMBURSEMENT RECIPIENTS
- ◆ TRUCK DEALERS AND INSTALLERS
- ◆ SALVAGE YARDS

## WHAT'S NEXT?

- ◆ CONTINUE COORDINATION WITH TECHNICAL ADVISORY COMMITTEE
- ◆ REVISE GUIDELINES AND APPLICATION MATERIALS
- ◆ ROLL OUT THE TRUCK REPLACEMENT PROGRAM
- ◆ REVISE THE MOYER-FUNDED PROGRAM
- ◆ KEEP LESSONS LEARNED IN MIND

